

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 09/08/2003

PATENT APPLICATION: US/09/856,114A

TIME: 11:28:36

Input Set : N:\EBONY'S\US09856114A.raw.txt

Output Set: N:\CRF4\09082003\I856114A.raw

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1 <110> APPLICANT: Hyo Jeong Hong
2      Chun Jeih Ryu
3      Hangsook Hur
4 <120> TITLE OF INVENTION: HUMANIZED ANTIBODY SPECIFIC FOR SURFACE
5      ANTIGEN PRE-S1 OF HBV AND PREPARATION METHOD THEREOF
6 <130> FILE REFERENCE: 118.13USWO
C--> 7 <140> CURRENT APPLICATION NUMBER: US/09/856,114A
8 <141> CURRENT FILING DATE: 2001-05-18
9 <150> PRIOR APPLICATION NUMBER: PCT/KR99/00699
10 <151> PRIOR FILING DATE: 1999-11-19
11 <150> PRIOR APPLICATION NUMBER: 1998-49663
12 <151> PRIOR FILING DATE: 1998-11-19
13 <160> NUMBER OF SEQ ID NOS: 28
14 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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17 <211> LENGTH: 26
18 <212> TYPE: DNA
19 <213> ORGANISM: Artificial Sequence
20 <220> FEATURE:
21 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 1
22 <400> SEQUENCE: 1
23      gagaattcac attcacgatg tacttg                                     26
25 <210> SEQ ID NO: 2
26 <211> LENGTH: 27
27 <212> TYPE: DNA
28 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 2
31 <400> SEQUENCE: 2
32      ggccccaggc ttcaccactt cagctcc                                     27
34 <210> SEQ ID NO: 3
35 <211> LENGTH: 18
36 <212> TYPE: DNA
37 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 3
40 <400> SEQUENCE: 3
41      gtgaagcctg gggcctca                                           18
43 <210> SEQ ID NO: 4
44 <211> LENGTH: 27
45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial Sequence
47 <220> FEATURE:

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48 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 4
49 <400> SEQUENCE: 4
50     agaactactg aatgcgtagc cagaagc                27
52 <210> SEQ ID NO: 5
53 <211> LENGTH: 27
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 5
58 <400> SEQUENCE: 5
59     gcattcagta gttcttggat gaactgg                27
61 <210> SEQ ID NO: 6
62 <211> LENGTH: 27
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 6
67 <400> SEQUENCE: 6
68     aatccgtcca atccactcaa gaccctg                27
70 <210> SEQ ID NO: 7
71 <211> LENGTH: 21
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 7
76 <400> SEQUENCE: 7
77     tggattggac ggatttatcc t                      21
79 <210> SEQ ID NO: 8
80 <211> LENGTH: 39
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 8
85 <400> SEQUENCE: 8
86     ggatttgtct gcagtcagtg tggccttgcc ctggaactt    39
88 <210> SEQ ID NO: 9
89 <211> LENGTH: 39
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 9
94 <400> SEQUENCE: 9
95     actgcagaca aatccacgag cacagcctac atggagctc    39
97 <210> SEQ ID NO: 10
98 <211> LENGTH: 33
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 10

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103 <400> SEQUENCE: 10
104      gtcgtactct cttgcacaga aatagaccgc cgt      33
106 <210> SEQ ID NO: 11
107 <211> LENGTH: 33
108 <212> TYPE: DNA
109 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 11
112 <400> SEQUENCE: 11
113      gcaagagagt acgacgaggc ttactggggc caa      33
115 <210> SEQ ID NO: 12
116 <211> LENGTH: 26
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 12
121 <400> SEQUENCE: 12
122      cggtcgactc atttaccggg agacag      26
124 <210> SEQ ID NO: 13
125 <211> LENGTH: 26
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 13
130 <400> SEQUENCE: 13
131      caaagcttgg aagcaagatg gattca      26
133 <210> SEQ ID NO: 14
134 <211> LENGTH: 36
135 <212> TYPE: DNA
136 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 14
139 <400> SEQUENCE: 14
140      tggagtttgg gtcacaaaga tatccccaca ggtacc      36
142 <210> SEQ ID NO: 15
143 <211> LENGTH: 48
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 15
148 <400> SEQUENCE: 15
149      atgacccaaa ctccactttc tttgtcggtt acccctggac aaccagcc      48
151 <210> SEQ ID NO: 16
152 <211> LENGTH: 39
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 16
157 <400> SEQUENCE: 16

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161 <211> LENGTH: 39
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 17
166 <400> SEQUENCE: 17
167      ctaatctatc tgggtgtctaa actggactct ggagtcacct      39
169 <210> SEQ ID NO: 18
170 <211> LENGTH: 17
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Synthetic oligonucleotide primer 18
175 <400> SEQUENCE: 18
176      gaagtcgacc taacact      17
178 <210> SEQ ID NO: 19
179 <211> LENGTH: 115
180 <212> TYPE: PRT
181 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Variable region of heavy chain in mouse KR127
184      antibody
185 <400> SEQUENCE: 19
186      Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
187      1          5          10          15
188      Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser
189      20          25          30
190      Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
191      35          40          45
192      Gly Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe
193      50          55          60
194      Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
195      65          70          75          80
196      Met Gln Leu Ser Ser Leu Thr Ser Val Asp Ser Ala Val Tyr Phe Cys
197      85          90          95
198      Ala Arg Glu Tyr Asp Glu Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
199      100         105         110
200      Val Ser Ala
201      115
203 <210> SEQ ID NO: 20
204 <211> LENGTH: 115
205 <212> TYPE: PRT
206 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Variable region of humanized heavy chain
209      HKR127HC(HZI)
210 <400> SEQUENCE: 20

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211      Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
212      1          5          10          15
213      Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser
214          20          25          30
215      Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
216          35          40          45
217      Gly Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Ala Gln Lys Phe
218          50          55          60
219      Gln Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
220      65          70          75          80
221      Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
222          85          90          95
223      Ala Arg Glu Tyr Asp Glu Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
224          100          105          110
225      Val Ser Ser
226          115
228 <210> SEQ ID NO: 21
229 <211> LENGTH: 115
230 <212> TYPE: PRT
231 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Variable region of humanized heavy chain
234      HKR127HC(HZIII)
235 <400> SEQUENCE: 21
236      Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
237      1          5          10          15
238      Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Ser
239          20          25          30
240      Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
241          35          40          45
242      Gly Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Ala Gln Lys Phe
243          50          55          60
244      Gln Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Val Tyr
245      65          70          75          80
246      Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
247          85          90          95
248      Ala Arg Glu Tyr Asp Glu Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
249          100          105          110
250      Val Ser Ser
251          115
253 <210> SEQ ID NO: 22
254 <211> LENGTH: 113
255 <212> TYPE: PRT
256 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: Variable region of light chain in mouse KR127
259      antibody
260 <400> SEQUENCE: 22
261      Asp Ile Leu Met Thr Gln Thr Pro Leu Ile Leu Ser Val Thr Ile Gly

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VERIFICATION SUMMARY

DATE: 09/08/2003

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Input Set : N:\EBONY'S\US09856114A.raw.txt

Output Set: N:\CRF4\09082003\I856114A.raw

L:7 M:270 C: Current Application Number differs, Wrong Format

STATISTICS SUMMARY

DATE: 09/08/2003

PATENT APPLICATION: US/09/856,114A

TIME: 11:28:37

Input Set : N:\EBONY'S\US09856114A.raw.txt

Output Set: N:\CRF4\09082003\I856114A.raw

Application Serial Number: US/09/856,114A

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 05-18-2001

Art Unit: PCT

Software Application: FastSEQ

Total Number of Sequences: 28

Total Nucleotides: 683

Total Amino Acids: 571

Number of Errors: 0

Number of Warnings: 0

Number of Corrections: 1

MESSAGE SUMMARY

270 C: 1 (Current Application Number differs)